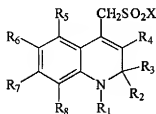
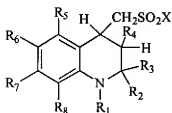


**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (currently amended) ~~A Process~~ process for the production of dihydroquinoline compounds of the general formula Ia or of tetrahydroquinoline compounds of the general formula Ib



Ia



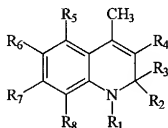
Ib

in which R₁ denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

R₂, R₃, R₄, R₅, R₆, R₇ and R₈ on each occurrence and independently of one another denote hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R₁ and R₈ together form a ring system and

X denotes OH, halogen, -O-R₉, -S-R₁₀ or -NR₁₁R₁₂ where R₉, R₁₀, R₁₁ and R₁₂ independently of one another denote hydrogen or a C1 to C20

hydrocarbon residue which can optionally contain one or more heteroatoms or/and one or more substituents, characterized in that wherein the corresponding compounds I'a

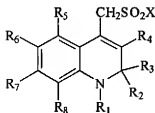


I'a

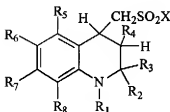
are sulfonated to form Ia (X = OH) and optionally converted by hydrogenation into Ib (X = OH).

2. (Currently amended) The Process process as claimed in claim 1, characterized in that wherein the sulfonation is carried out by means of concentrated sulfuric acid.
3. (Currently amended) The Process process as claimed in claim 1 or 2, characterized in that wherein the sulfonic acid group formed in the sulfonation is derivatized.
4. (Currently amended) The Process process as claimed in claim 3, characterized in that wherein the sulfonic acid group is converted into a sulfochloride.
5. (Currently amended) The Process process as claimed in claim 3 or 4, characterized in that wherein the sulfochloride group is reacted with a primary or secondary amine to form a sulfonamide.

6. (Currently amended) A Dihydroquinoline dihydroquinoline compound of the general formula Ia or a tetrahydroquinoline compound of the general formula Ib



Ia



Ib

in which R_1 denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

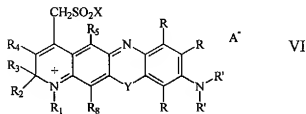
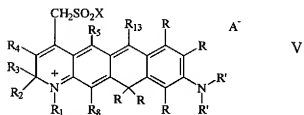
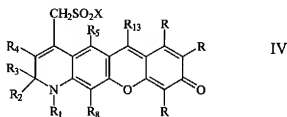
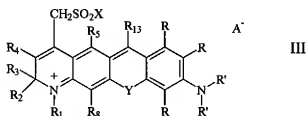
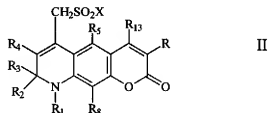
R_2 , R_3 , R_4 , R_5 , R_6 , R_7 and R_8 on each occurrence and independently of one another denote hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R_1 and R_8 together form a ring system and

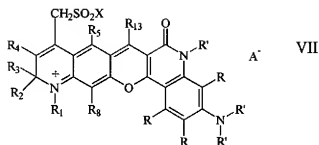
X denotes OH, halogen, $-O-R_9$, $-S-R_{10}$ or $-NR_{11}R_{12}$ where R_9 , R_{10} , R_{11} and R_{12} each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms

or/and one or more substituents, in particular $-\text{SO}_3\text{H}$, $-\text{PO}_3\text{H}_2$ and $-\text{COOH}$.

7. (Currently amended) ~~The Compound~~ compound as claimed in claim 6, wherein R_1 represents an aryl or alkyl residue and in particular a C5 to C15 aryl or a C1 to C20 alkyl residue, R_2 and R_3 are methyl and R_4 denotes hydrogen.
8. (Currently amended) ~~The Compound~~ compound as claimed in claim 6 or 7, characterized in that wherein
 R_7 represents a hydroxy or methoxy residue.
9. (Currently amended) ~~The Process~~ compound as claimed in claim 6 one of the claims 6 to 8, characterized in that wherein
 R_8 represents a nitroso group.
10. (Currently amended) ~~The Process~~ compound as claimed in claim 6 one of the claims 6 to 7, characterized in that wherein
 R_6 represents a formyl or a hydroxymethyl group.
11. (Currently amended) ~~The Compound~~ compound as claimed in claim 6 one of the claims 6 to 10, characterized in that , wherein
X denotes halogen and in particular Cl.
12. (Currently amended) ~~The Compound~~ compound as claimed in claim 6 one of the claims 6 to 11, characterized in that , wherein
X represents the residue $-\text{NR}_{11}\text{R}_{12}$ ~~where the residues R_{11} and R_{12} are defined as in claim 6.~~

13. (Currently amended) ~~A Process~~ process for the production of dyes of the general formulae II to VII containing $-\text{SO}_2\text{X}$





in which R_1 , R_2 , R_3 , R_4 , R_5 and R_8 are defined as in claims 1 to 12, R on each occurrence can be the same or different and is defined as for R_1 , R_2 , R_3 , R_4 , R_5 and R_8 and R' on each occurrence and independently of one another denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R and R' together form a ring system which can contain one or more double bonds,

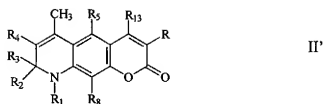
R_{13} on each occurrence and independently of one another denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, where R_{13} in particular represents hydrogen, aryl, carboxyphenyl, alkyl, perfluoroalkyl, cycloalkyl, pyridyl or carboxypyridyl,

X denotes OH, halogen, $-O-R_9$, $-S-R_{10}$ or $-NR_{11}R_{12}$ where R_9 , R_{10} , R_{11} and R_{12} each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or one or more substituents, and

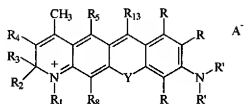
Y in formula III denotes O, S or Se and Y in formula VI denotes O, S or $C(R)_2$,

characterized in that, wherein

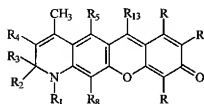
corresponding compounds of formulae II' to VII'



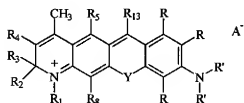
II'



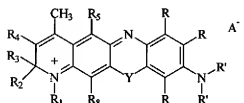
III'



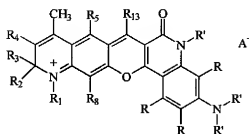
IV'



V'



VI'



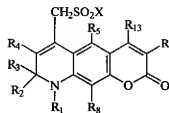
VII'

are sulfonated with the proviso that for compounds of formula III in which Y = O and for compounds of formula IV, X does not denote OH.

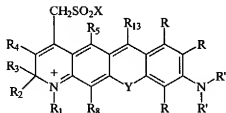
14. (Currently amended) A method for producing polycyclic dyes comprising

~~Use of using~~ a compound as claimed in ~~one of the claims 6 to 12~~ claim 6
 or of a compound that is ~~obtainable~~ obtained by the process as claimed in
claim 1 ~~one of the claims 1 to 5 to produce polycyclic dyes.~~

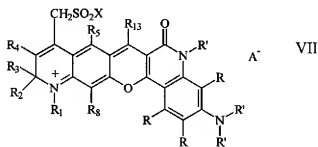
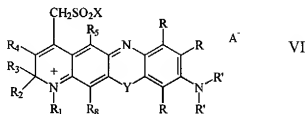
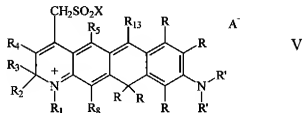
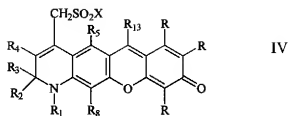
15. (Currently amended) The method ~~Use~~ as claimed in claim 14 wherein the ~~to produce~~ polycyclic dyes are of formulae II to VII.
16. (Currently amended) A process ~~Process~~ for the production of polycyclic dyes, wherein
 characterized in that
 compounds which have a dihydroquinoline end group with a 4-methyl group
 are sulfonated and optionally hydrogenated to form a tetrahydroquinoline
 with the proviso that the polycyclic dye is not a compound of formula III in
 which Y = O and X = OH or of formula IV in which X = OH.
17. (Currently amended) The polycyclic ~~Polyeyelic~~ dye which is ~~obtainable~~
produced according to the process as claimed in ~~one of the claims 13 to 16~~
claim 13.
18. (Currently amended) A polycyclic ~~Polyeyelic~~ dye of the general formulae II
 to VII



II



III



in which

R' denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

R on each occurrence and independently of one another denotes hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R' and R together form a ring system which can contain one or more multiple bonds,

R₁₃ on each occurrence and independently of one another denotes

hydrogen or a hydrocarbon group with 1-20 C atoms where the

hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, where R_{13} in particular represents hydrogen, aryl, carboxyphenyl, alkyl, perfluoroalkyl, cycloalkyl, pyridyl or carboxypyridyl,

X denotes OH, halogen, $-O-R_9$, $-S-R_{10}$ or $-NR_{11}R_{12}$ where R_9 , R_{10} , R_{11} and R_{12} each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or one or more substituents, and

Y in formula III denotes O, S or Se and Y in formula VI denotes O, S or $C(R)_2$,

with the proviso that the dye is not a compound of the general formula III in which $Y = O$ and $X = OH$ or of the general formula IV in which $X = OH$.

19. (Currently amended) The polycyclic ~~Polycyclic~~ dye as claimed in claim 17 or 18, wherein
~~characterized in that~~
X denotes halogen and in particular Cl.
20. (Currently amended) The polycyclic ~~Polycyclic~~ dye as claimed in claim 17 or 18, wherein
~~characterized in that~~
X represents the residue $-NR_{11}R_{12}$ where the residues R_{11} and R_{12} are defined as in claim 18.
21. (Currently amended) The polyacrylic ~~Polycyclic~~ dye as claimed in claim 20, ~~characterized in that~~ wherein
 R_{11} or/and R_{12} represents an alkyl or aryl residue substituted with $-COOH$.

22. (Currently amended) In a method for the detection of an analyte in a sample, the improvement which comprises using a labeled receptor for the analyte, wherein the label is a compound ~~Use of a dye as claimed in one of claim 18~~ the claims 17 to 21 to label an analyte.
23. (Currently amended) The method Use as claimed in claim 22,
characterized in that wherein
~~the analyte is a biomolecule and in particular a peptide or nucleotide.~~
24. (Currently amended) The method Use as claimed in claim 22 or 23,
characterized in that wherein
~~the labelling occurs by the dye is binding to an NH₂ or SH group of the analyte.~~
25. (Currently amended) The method Use of claim 22 wherein the label is a dye as claimed in claim 19 to label an analyte in which the dye is bound by coupling to an amino group of the analyte.
26. (Currently amended) The method Use of claim 22 wherein the label is a dye as claimed in claim 21 to label an analyte where and wherein the dye which is for example activated as an NHS ester is bound by coupling to an amino group of the analyte.
27. (Currently amended) The method Use of claim 22 wherein the label is a dye as claimed in one of the claims 17 to 24 claim 17 or is coupling to another dye.
28. (Currently amended) The method Use of claim 22 wherein the label is as claimed in claim 27,
characterized in that wherein

it the label is coupled via an amino group of the other dye to thus form a FRET pair.

29. (New) The polycyclic dye as claimed in claim 19, wherein X denotes chlorine.